

**METHOD AND APPARATUS FOR PROVIDING TANDEM
CONNECTION, PERFORMANCE MONITORING, AND
PROTECTION ARCHITECTURES OVER ETHERNET
PROTOCOLS**

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ABSTRACT

Methods and apparatus for providing tandem connection monitoring and
10 performance monitoring capabilities in Ethernet and converged data link protocols are
disclosed. According to one aspect of the present invention, a method for processing a
packet which includes a preamble arrangement having at least one associated frame
involves receiving a packet from a first network element included in a network path at a
second network element included in the network path, and determining whether at least
15 one error has arisen between a source of the network path and the second network
element. When it is determined that an error has arisen between the source of the
network path and the second network element, a first error count indication is inserted in
the preamble arrangement to substantially account for the error.